What is claimed is:

1. An image processing apparatus for supplying received image data to an output device to reproduce the image data, the apparatus comprising:

a converter for converting the received image data into image data of a standard color space;

a decision portion for deciding whether the image data converted by the converter are within the reference range of the color reproduction in the output device; and

a controller for controlling the output device to perform a calibration of making the color reproduction range of the output device close to the reference range when the decision portion has decided that the image data are out of the reference range.

2. The image processing apparatus according to claim 1, further comprising a display for displaying a message asking whether the calibration is necessary or not when the decision portion has decided that the image data are out of the reference range, wherein the controller controls the output device to perform the calibration in accordance with a specific instruction operation responding to the message displayed on the display.

3. The image processing apparatus according to claim 1, wherein the output device performs γ correction of the input image data, the corrected image data are reproduced, and characteristics of the γ correction of the output device are changed in the calibration.

4. The image processing apparatus according to claim 1, wherein in the calibration the output device reproduces

a predetermined test pattern and the controller calibrates the color reproduction range of the output device so that the reproduced test pattern becomes a predetermined target value.

5. The image processing apparatus according to claim 1, wherein the output device reproduces the image on a piece of paper.

6. The image processing apparatus according to claim 5, wherein in the calibration the output device reproduces a predetermined test pattern on a piece of paper, and the controller calibrates the color reproduction range of the output device so that the image data obtained when an image reader reads the test pattern become a predetermined target value.

7. An image processing method for reproducing image data by an output device, the method comprising the steps of:

receiving the image data;

converting the received image data into image data of a standard color space;

deciding whether the image data converted in the converting step are within the reference range of the color reproduction in the output device; and

controlling the output device to perform a calibration of making the color reproduction range of the output device close to the reference range when the image data have been decided to be out of the reference range in the deciding step.

8. The image processing method according to claim 7, further comprising the step of displaying a message asking whether the calibration is necessary or not when it is decided that the image data is out of the reference range in the deciding step, wherein the controlling step includes the step of

controlling the output device to perform the calibration in accordance with a specific instruction operation responding to the message displayed on the display.

9. The image processing method according to claim 7, wherein the output device performs γ correction of the input image data, reproduces the corrected image data, and characteristics of the γ correction of the output device are changed in the calibration.

10. The image processing method according to claim 7, wherein the controlling step includes the steps of:

reproducing a predetermined test pattern in the output device; and

calibrating the color reproduction range of the output device so that the test pattern reproduced in the reproducing step becomes a predetermined target value.

11. The image processing method according to claim 7, wherein the output device reproduces the image on a piece of paper.

12. The image processing method according to claim 11, wherein the controlling step includes the steps of:

reproducing a predetermined test pattern on a piece of paper in the output device; and

calibrating the color reproduction range of the output device so that the image data obtained when an image reader reads the test pattern reproduced in the reproducing step become a predetermined target value.

13. An image processing system comprising:

a γ correction portion for performing γ correction of the received image data;

an output device for reproducing the image data

corrected by the γ correction portion;

a converter for converting the received image data into image data of a standard color space;

a decision portion for deciding whether the image data converted by the converter are within the reference range of the color reproduction in the output device; and

a controller for calibrating the characteristics of the γ correction portion so as to make the color reproduction range of the output device close to the reference range when the decision portion has decided that the image data are out of the reference range, wherein the γ correction portion corrects the image data by the calibrated characteristics, and the output device reproduces the corrected image data.

14. The image processing system according to claim 13, further comprising a display for displaying a message asking whether the calibration is necessary or not when the decision portion has decided that the image data are out of the reference range, wherein the controller controls the output device to perform the calibration in accordance with a specific instruction operation responding to the message displayed on the display.

15. The image processing system according to claim 13, wherein in the calibration the output device reproduces a predetermined test pattern, and the controller calibrates the characteristics of the γ correction portion so that the reproduced test pattern becomes a predetermined target value.

16. The image processing system according to claim 13, wherein the output device reproduces the image on a piece of paper.

17. The image processing system according to claim

16, further including an image reader, wherein in the calibration the output device reproduces a predetermined test pattern on a piece of paper, and the controller calibrates the characteristics of the γ correction portion so that the image data obtained when an image reader reads the test pattern become a predetermined target value.